

## ABSTRACT

A system and method for identifying, reporting, and evaluating a presence of a solid, liquid, gas, or other substance of interest, particularly a  
5 dangerous, hazardous, or otherwise threatening chemical, biological, or radioactive substance. The system comprises one or more substantially automated, location self-aware remote sensing units; a control unit; and one or more data processing and storage servers. Data is collected by the remote sensing units and transmitted to the control unit; the control unit generates and uploads a report incorporating the data  
10 to the servers; and thereafter the report is available for review by a hierarchy of responsive and evaluative authorities via a wide area network. The evaluative authorities include a group of relevant experts who may be widely or even globally distributed.

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